

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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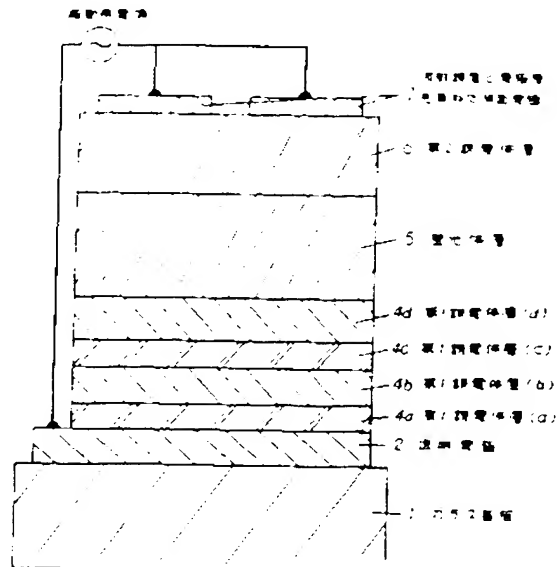
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TITLE : THIN FILM ELECTROLUMINESCENCE  
DEVICE CONTAINING LIGHT  
INTERFERENCE FILTER



ABSTRACT : PURPOSE: To efficiently take out brightness from a fluorescent layer from a light emitting face by making a constitution wherein voltage is applied to a laminated structure comprising a fluorescent body or the fluorescent layer and a dielectric layer.

CONSTITUTION: A transparent electrode 2 is formed on a glass substrate 1, a first dielectric layer (a) 4a and a first dielectric layer (b) 4b are formed, and again the same thin dielectric films are laminated in the sequence of a first dielectric layer (c) 4c and a first dielectric layer (d) 4d, wherein a fluorescent layer 5 is further formed on it, and a thin dielectric film is formed as a second dielectric layer 6 to form a back plate 7 serving both as a reflection mirror layer and an electrode layer. Thus an electroluminescence EL device provided both with an electroluminescence and a light interference multilayer film filter is formed. Thus a means functioning similarly to a Fabry-perot interferometer is provided in the thin film EL device. Thus light of desired luminescent wavelength emitted from a luminescent center in the fluorescent layer can be efficiently taken out from a display surface so that luminous efficiency of 10 times or larger can be obtained.

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